

Product Information

MemDX™ Membrane Protein Human KDELR2 (KDEL endoplasmic reticulum protein retention receptor 2) Expressed *in vitro* E.coli expression system, Full Length

Cat. No.: **MPX2882K**

This product is for research use only and is not intended for diagnostic use.

This product is a Human KDELR2 membrane protein expressed *in vitro* E.coli expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

KDELR2

Protein Length

Full Length

Protein Class

Transport

TMD

7

Sequence

MNIFRLTGDLSHLAAIVILLKKIWKTRSCAGISGKSQLLFALVFTRYLDLFTSFISLYNTSMKVIYLACSYATVYLIYLFKFKATYDGNHDT

Product Description

Expression Systems

in vitro E.coli expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

KDEL2

Full Name

KDEL endoplasmic reticulum protein retention receptor 2

Introduction

Retention of resident soluble proteins in the lumen of the endoplasmic reticulum (ER) is achieved in both yeast and animal cells by their continual retrieval from the cis-Golgi, or a pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asp-glu-leu (KDEL) in animal cells, and his-asp-glu-leu (HDEL) in *S. cerevisiae*. This process is mediated by a receptor that recognizes, and binds the tetrapeptide-containing protein, and returns it to the ER. In yeast, the sorting receptor encoded by a single gene, ERD2, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDEL2 was the second member of the family to be identified, and it encodes a protein which is 83% identical to the KDEL1 gene product. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Alternative Names

KDEL2; ELP1; OI21; ELP-1; ERD2.2; ER lumen protein-retaining receptor 2; (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2; ERD-2-like protein; ERD2-like protein 1; KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2; KDEL receptor 2; KDEL endoplasmic reticulum protein retention receptor 2

Gene ID

[11014](#)

UniProt ID

[P33947](#)